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10/751,410	01/06/2004	Jong Yeul Suh	0465-1130P	3175

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EXAMINER
KHAN, ASHER R

ART UNIT	PAPER NUMBER
4134	

NOTIFICATION DATE	DELIVERY MODE
02/19/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

		Application No.	Applicant(s)
Office Action Summary		10/751,410	SUH, JONG YEUL
		Examiner	Art Unit	
		ASHER KHAN	4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *06 January 2004*.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) *1-26* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-26* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *06 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/26/2005*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   **Office Action Summary**   Part of Paper No./Mail Date 20080204

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claim1, 3, 8, 9, 12-15, 19, 23 and 24 are rejected under 35 U.S.C. 102(e) as

being anticipated by U.S. Patent Pub. 2007/0031111 A1 to *Thiagarajan et al.*

("Thiagarajan").

           As to claim 1, *Thiagarajan* discloses a PVR (Personal Video Recorder)

system (Abstract)(Fig.3) comprising:

           a channel demodulating part for receiving, and demodulating a

broadcasting program on a particular channel (Tuner 306)(0037);

           a storage medium for storing the broadcasting program (0038);

an EPG parsing part for extracting information on the broadcasting program intended to

record from a data demodulated at the channel demodulating part (Processor(s)

308)(0050)(0040);

           an upload/download controlling part for receiving the broadcasting

program intended to record from the channel demodulating part, storing the

broadcasting program in the storage medium (0047), and controlling reproduction of the

broadcasting program stored in the storage medium in response to an external

recording/reproduction signal, and controlling the EPG parsing part (0042, 0043,0071);

and

a re-recording processing part for storing identifying information for identifying success of recording of the broadcasting program intended to record and information on the broadcasting program intended to record (0050), and identifying the identifying information (0062), to request re-transmission of the broadcasting program intended to record through a network when recording of the broadcasting program intended to record fails, or to renew the information on the broadcasting program intended to record(0066)(0074).

As to claim 3, *Thiagarajan* further discloses wherein the storage medium is a hard disc (0015).

As to claim 8, *Thiagarajan* further discloses wherein the re-recording processing part includes:

a recording parameter storage part for storing identifying information for identifying success of recording of the broadcasting program intended to record, and information on the broadcasting program intended to record, and a network interface part for identifying the identifying information, to request re- transmission of the broadcasting program intended to record through a network when recording of the broadcasting program intended to record fails, or to renew the information on the broadcasting program intended to record(0066-0070) (0074).

As to claim 9, *Thiagarajan* further discloses wherein the recording parameter storage part is a ROM (Fig. 3, non-volatile memory 316) (0038).

As to claim 12, *Thiagarajan* further discloses wherein the network interface part is a LAN (Fig. 2, Ethernet 218 (Ethernet is used with a LAN) or a MODEM (Fig. 3, modem 334).

As to claim 13, *Thiagarajan* further discloses wherein the network interface part is connected to a program server (Fig. 1, 102) (0018) or a broadcasting station for communication (Fig 1, Broadcast transmitter 130) (0021).

As to claim 14, *Thiagarajan* discloses a method for recording a video in a PVR system (Abstract) having a storage medium for storing a broadcasting program intended to record, and a re-recording processing part having a recording parameter storage part and a network interface part (Fig 3), comprising the steps of:

setting a recording parameter field at the recording parameter storage part, and storing information on the broadcasting program intended to record and identifying information for identifying success of recording of the broadcasting program in the recording parameter field, according to user's recording setting information(0062)(0066-0070);

writing the broadcasting program on the storage medium according to the information on the broadcasting program (0066);

determining success of recording of the broadcasting program according to the identifying information(0060); and

if the recording of the broadcasting program fails as a result of the determination, requesting re-transmission of the broadcasting program intended to record through the network interface part.(0066-0070).

As to claim 15, *Thiagarajan* further discloses wherein the user's recording setting information is information related to at least one of recording, scheduled recording, time shift (Fig 5, 502).

As to claim 19, *Thiagarajan* further discloses comprising the steps of:

(a) determining successive recording of the broadcasting program intended to record (0066); and

(b) changing identifying information value stored in the recording parameter storage part if the recording is successful as a result of the determination, and maintaining the identifying information value stored in the recording parameter storage part as it is if the recording fails, after the step of writing the broadcasting program on the storage medium (0067-0070).

As to claim 23, *Thiagarajan* further discloses transmitting information on the broadcasting program having recording thereof failed to a program server or a broadcasting station (0066)(Fig. 1, 104,136); and

re-receiving the broadcasting program having recording thereof failed from the program server or the broadcasting station, and writing the broadcasting program having recording thereof failed, after step of requesting re-transmission of the broadcasting program intended to record through the network interface part (0066-0070).

As to claim 24, *Thiagarajan* further discloses wherein the information on

the transmitted broadcasting program is a program ID for matching to the program (Fig.

4, 405).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent

Pub. 2007/0031111 A1 to *Thiagarajan et al. ("Thiagarajan")* in view of U.S. Patent Pub.

2002/0141451 A1 to *Gates et al. ("Gates").*

As to claim 2, *Thiagarajan* further discloses wherein the channel

demodulating part includes;

a channel receiving part for tuning to, and demodulating a

broadcasting signal on a particular channel (Client device 108)(0037).

Thiagarajan does not expressly disclose forwarding in a form of a

transport TP stream, and a TP processing part for splitting the TP stream from the

channel receiving part into an audio PES stream, a video PES stream, and a data

stream.

Gates discloses forwarding in a form of a transport TP stream, and a TP processing part for splitting the TP stream from the channel receiving part into an audio PES stream, a video PES stream, and a data stream (0036).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine teachings of *Thiagarajan* and *Gates*. Motivation to combine would be to demultiplex the transport stream to reproduce it on reproducing medium (0036).

Therefore it would have been obvious to combine *Thiagrajan* with *Gates* to obtain the invention of claim 2.

5.   Claim 4, 5, 18, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to *Thiagarajan et al. ("Thiagarajan")* in view of U.S. Patent Pub. 2002/0188945 A1 *to McGee et al. ("McGee")*

As to claim 4, *Thiagarajan* discloses wherein the information on the broadcasting program extracted at the EPG parsing part is channel information, a record starting time of the broadcasting program intended to record (Fig 4, Program composite key 404)(0067).

Thiagarajan does not expressly disclose a record end time.

McGee discloses a record end time (0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data

in an electronic program guide to determine whether a program will be re-broadcast (*Thiagarajan*, 0050).

As to claim 5, *Thiagarajan* further discloses wherein the record starting time is a starting time of the program intended to record if the recording is a scheduled recording, and a time when a recording/time shift button is pressed if the recording is a direct recording or a time shift (0019)(0058).

As to claim 18, *Thiagarajan* the broadcasting program information includes channel information, record starting time, and record end time of the recording program, and the record starting time is a starting time of the program intended to record in a case of the scheduled recording, and a time when a recording/time shift button is pressed in a case of direct recording or a time shift(0019)(0058).

Thiagarajan does not expressly disclose a record end time.

McGee discloses a record end time (0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast (*Thiagarajan*, 0050).

As to claim 25, *Thiagarajan* further discloses wherein the step of renewing the information on the broadcasting program stored in the recording parameter storage part includes the steps of;

re-receiving program related information from the program server or the broadcasting station(0066); and

overwriting the program related information on a relevant position of the recording parameter storage part, and scheduling writing of the program automatically by using stored record starting time and record end time (Inherent in 0066).

Thiagarajan does not expressly disclose record end time.

McGee discloses a record end time (0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time. Motivation to combine the elements would have been to form a unique program combination for comparison to similar program elements in EPG data in an electronic program guide to determine whether a program will be re-broadcast (*Thiagarajan,* 0050).

As to claim 26, *Thiagarajan* further discloses herein the overwritten program related information is channel information, a record starting time of a recording program(0050)(0066).

Thiagarajan does not expressly disclose a record end time.

McGee discloses a record end time (0003).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine record end time information with channel information and a record starting time. Motivation to combine the elements would have been to form

a unique program combination for comparison to similar program elements in EPG data

in an electronic program guide to determine whether a program will be re-broadcast

(*Thiagarajan,* 0050).

    Therefore it would have been obvious to combine *Thiagarajan* with

McGee to obtain the invention of claims 4, 18, 25 and 26.

6. Claim 6, 7 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Patent Pub. 2007/0031111 A1 to *Thiagarajan et al. ("Thiagarajan")* in view of U.S.

Patent Pub. 2003/0014557 A1 *to Berger et al. ("Berger").*

    As to claim 6, *Berger* discloses wherein the upload/download

controlling part initializes a recording flag value at the re-recording processing part to a

first identifying information value in response to an external recording signal, Sets the

first identifying information value to a second identifying information value if the

recording of the broadcasting program intended to record is successful, and maintains

the first identifying value as it is if the recording of the broadcasting program intended to

record fails (0056).

    At the time of invention it would have been obvious to a person of

ordinary skill in the art to combine the teaching of *Thiagarajan* with *Berger.* Motivation to

combine the elements would have been to identify success or failure of the event (0056)

the event could be something such as recording. Also by simply changing the bits

system would be able to recognize if the recording was successful or unsuccessful.

As to claim 7, *Berger further* discloses wherein the first identifying information value is set to ' 1 ', and the second identifying information value is reset to '0' (0056). In addition, the same motivation is used as the rejection of claim 6.

As to claim 20, *Berger* further discloses The method as claimed in claim 19, wherein the step (b) includes the steps of;

resetting the identifying information value set to '1' at the recording parameter storage part to '0' if the recording is successful as a result of the determination, and maintaining the identifying information value set to '1' at the recording parameter storage part as it is if the recording fails (0056). In addition, the same motivation is used as the rejection of claim 6.

As to claim 21, *Thiagarajan* further discloses, further comprising the step of changing the identifying information value stored in the recording parameter storage part if there is a user's record stop request (0060).

Thiagarajan does not expressly disclose changing the identifying information value.

Berger discloses changing the identifying information value (0056). In addition, the same motivation is used as the rejection of claim 6.

As to claim 22, *Thiagarajan* discloses comprising the step of maintaining the identifying information values of the broadcasting programs other than one program if the user requests writing of more than one program at the same time.

Thiagarajan does not expressly disclose identifying information other than one program to be '1'.

Berger discloses identifying information to be other than one program to be '1'(0056). In addition, the same motivation is used as the rejection of claim 6.

Therefore it would have been obvious to combine the teachings of *Thiagarajan* and *Berger* to obtain the invention as claimed in 6, 7 and 20-22.

7.   Claim 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Pub. 2007/0031111 A1 to *Thiagarajan et al. ("Thiagarajan")* in view of U.S. Patent Pub. 2002/0188945 A1 *to McGee et al. ("McGee")* and Patent Pub. 2004/0002987 A1 to *Clancy et al. ("Clancy")* and in further view of Patent Pub. 2002/0021886 A1. to *Nakajima et al. (Nakajima).*

As to claim 11, *Nakajima* discloses wherein the record starting time field, or the record end time field includes 4 bits of month field, 5 bits of day field, 5 bits of hour field, and 6 bits of minute field (0209).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of *Thiagarajan* with *Berger*. Motivation to combine the elements would have been to express the fields in to binary numbers (0209) for the reason to be able to integrate the system into a digital system.

As to claim 17, *Thiagarajan* further discloses wherein the record starting time field or the record end time field includes 4 bits of month field, 5 bits of day field, 5 bits of hour field, and 6 bits of minute field.

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of *Thiagarajan* with *Berger*. In addition, the same motivation is used for rejection as claim 11.

Therefore it would have been obvious to combine the teachings of

Thiagarajan and *Nakajima* to obtain the invention as claimed in 6, 7 and 20-22.

8.   Claim 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Patent Pub. 2007/0031111 A1 to *Thiagarajan et al. ("Thiagarajan")* in view of U.S.

Patent Pub. 2002/0188945 A1 *to McGee et al. ("McGee")* and in further view of U.S.

Patent Pub. 2004/0002987 A1 to *Clancy et al. ("Clancy")*.

As to claim 10, *Thiagarajan* further discloses wherein the recording

parameter storage part includes one bit of identifying information field, 20 bits of record

starting time field, 20 bits of record end time field, and 7 bits of channel information field

(Fig 5, 526) (Fig 4, Program composite key 404).

Thiagarajan does not expressly disclose a record end time field and

number of bits to be used in each field.

McGee discloses a record end time field (0003).

Clancy discloses that EPG data may be in any binary format

(0080).

At the time of invention it would have been obvious to a person of

ordinary skill in the art to combine the teaching of *Thiagarajan*, *McGee* and *Clancy*.

Motivation to combine the three references would have been to express the EPG Data

in binary to for facilitating storage and/or compression of data (0080), so the system is

able to store more information and process the information faster.

As to claim 16, *Thiagarajan* further discloses wherein the recording parameter field includes one bit of identifying information field, 20 bits of record starting time field, 20 bits of record end time field, and 7 bits of channel information field.

Thiagarajan does not expressly disclose a record end time field.

McGee discloses a record end time field (0003).

Clancy discloses that EPG data may be in any binary format (0080).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the teaching of *Thiagarajan*, *McGee* and *Clancy*. In addition, the same motivation is used as the rejection for claim 10.

Therefore it would have been obvious to combine *Thiagarajan*, *McGee* and *Clancy* to obtain the invention of claims 10 and 16.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHER KHAN whose telephone number is (571)270-5203. The examiner can normally be reached on Monday-Friday 9:30 am - 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. K./
Examiner, Art Unit 4134

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 4134